

Algebra 1B Live Lesson

U3L8: Polynomials and Factoring Unit Review



Agenda



1. Review selected problems and topics to help complete the Unit 3 Sample Work and study for the Unit 3 Test.

2. Use the 2-column note system to take better notes in math class. Bring your math notebook and pen or pencil to each math LiveLesson class.

2-Column Notes Template



1. Announcements/To Do's
2. School-Wide Learner Outcomes
3. LL Objectives
4. Vocabulary words
5. Problems
6. Summary (End of class)

1. Write down important details.
2. What are you going to work on this week?
3. Write down your own questions.
4. Definitions (fill in as we go)
5. Steps to solving problems
6. 1 or 2 sentences about the LL class.

Reminders and To – Do's



Information

1. Complete 1 math lesson per day.
2. Check your WebMail every day
3. Be prepared to spend 4 - 6 hours per day on schoolwork.
4. Remind your Learning Coach to take daily attendance

What to do

1. Go to your Planner in Connexus to find the math lesson for the day
2. Go to Connexus to find WebMail
3. Complete lessons for the day from your Planner. Do not get behind on lessons.
4. Have your Learning Coach log into Connexus daily.

Reminders and To – Do's



Information

5. Go to the Message Board first for information about our math class.

6. Contact Mr. Elizondo for math questions.

Remember: You need at least 2 phone calls with Mr. Elizondo per semester.

What to do

6. Call (559) 549 - 3244 and leave a voicemail if call is not answered.

Make an appointment at:
<https://elizondo.youcanbook.me>

Send a WebMail

1. U3L1



Simplify. $2m^3n^3 + 9m^3n^3$

$$\begin{array}{r} 2m^3n^3 \\ + 9m^3n^3 \\ \hline 11m^3n^3 \end{array}$$

2. U3L2



Factor the polynomial. $14n^3 - 35n^2 + 28$

$$7(2n^3 - 5n^2 + 4)$$

3. U3L3



Simplify using the FOIL method. $(9z + 4)(5z - 3)$

$$\begin{array}{r} 45z^2 - 27z \\ + \quad \quad +20z - 12 \\ \hline 45z^2 - 7z - 12 \end{array}$$

4. U3L4



Simplify the product. $(z - 5)(z + 5)$

$$\begin{array}{r} z^2 + 5z \\ + \quad - 5z - 25 \\ \hline z^2 - 25 \end{array}$$

5. U3L5



Factor the expression. $x^2 + 5x - 6$

$$(x + 6)(x - 1)$$

Check

$$\begin{array}{r} x^2 - 1x \\ + \quad \quad + 6x - 6 \\ \hline x^2 + 5x - 6 \end{array}$$

6. U3L6



a b c

Factor the expression. $2k^2 - 13k - 24$

$3 \cdot -16$
 $3k, -16k$

$$a \cdot c = 2 \cdot -24$$

$$a \cdot c = -48$$

$$2k^2 + \underline{\quad\quad} + \underline{\quad\quad} - 24$$

$$2k^2 + \underline{3k} + \underline{-16k} - 24$$

$$k(2k + 3) + -8(2k + 3)$$

$$(k - 8)(2k + 3)$$

- $1 \cdot -48$
- $-1 \cdot 48$
- $2 \cdot -24$
- $-2 \cdot 24$
- $3 \cdot -16$
- $-3 \cdot 16$
- $4 \cdot -12$
- $-4 \cdot 12$
- $6 \cdot -8$
- $-6 \cdot 8$

7. U3L7



Factor the expression. $27w^2 - 12$

$$3(9w^2 - 4)$$

$$3(3w + 2)(3w - 2)$$

A. U3L5



Factor the expression. $t^2 + 10t + 16$

$$(t + 8)(t + 2)$$

Check

$$\begin{array}{r} t^2 + 2t \\ + \quad \quad + 8t + 16 \\ \hline t^2 + 10t + 16 \end{array}$$

B. U3L6



Factor the expression. $9r^2 + 3r - 30$ $3(\overset{a}{3}r^2 + \overset{b}{r} - \overset{c}{10})$

$\overset{-5*6}{-5r, +6r}$

$$a*c = 3*-10$$

$$a*c = -30$$

$$3(3r^2 + \underline{\quad\quad} + \underline{\quad\quad} - 10)$$

$$3(3r^2 + \underline{6r} + \underline{-5r} - 10)$$

$$3[3r(r + 2) + -5(r + 2)]$$

$$\mathbf{3(3r-5)(r + 2)}$$

$$1*-30$$

$$-1*30$$

$$2*-12$$

$$-2*12$$

$$3*-10$$

$$-3*10$$

$$5*-6$$

$$-5*6$$

C. U3L7



Factor the expression. $25z^2 + 40z + 16$

$$(5z + 4)(5z + 4)$$

Check

$$\begin{array}{r} 25z^2 + 20z \\ + \quad \quad + 20z + 16 \\ \hline 25z^2 + 40z + 16 \end{array}$$

Questions?



- Check the Message Board first
- Send a WebMail
- You can also make an appointment at <https://elizondo.youcanbook.me>
- You can also call me at (559) 549-3244. If I'm not available to answer your call, please leave a voicemail with your full name and phone number.